0.00

QC

Quality Control

Memo

									DQA:	Date		
es / No				WORK ORDER NON-C	O	NFORM	MANCE / UPDATE		•			
									QA Closed:	Date	·	
				DISPOSITION			AGAINST DEPARTMENT/PROCESS					
:I				Rework	1		Skid-tube Crosstub	e []	Water Jet	Engineering	
lo				Scrap			Machining Small Fa	b	4		Quality	
NCR No.				Work Order Update			~ _	~]	Supplier		
			Descri	ption of work order update		Initial	Action		Sign &			
Date	Step	Qty	C	or Non-conformance	Ch	nief Eng	Description		Date	Verification	QC Inspector	
										• .		
	ļ								l '			
	1											
	1											
					İ							
										<u></u>		
				F	AUL	LT CATE	GORY					
ng Gear				General		_		_	-	_	_	
Bending				Bend		Grain		\perp	4		Pressure/Forced	
Centre N	ot Conce	ntric to (O/S	BOM/Route	L	Hardwa	re		Over/Under	tolerance	Temperature/Cure	
Cracks				Broken/Damaged		Inspecti	ion Incomplete		Part Incorre	ct _	Weld	
Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/Unclear	L	Part Lost/M	issing	Wrong Stock Pulled	
Cuffs				Contamination		Mainte	enance		Part Moved			
Heat Trea	at			Countersink		Mislabe	eled		Positioned V	Wrong		
Inspectio	n Strip in	Tube		Cut Too Short		Misread			Power Loss/	'Surge	Other	
Ripples in Bend Drill Holes						Offset						
	Date Date Bending Centre N Cracks Crushed/ Cuffs Heat Trea	Date Step Date Step Qty Date Step Oty Bending Centre Not Concentric to C Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube	Date Step Qty Descri Date Step Qty Gear Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube	DISPOSITION Rework Scrap Use-as-is Work Order Update Date Step Qty Description of work order update or Non-conformance Fig Gear General Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Burrs Cuffs Heat Treat Countersink Cut Too Short	DISPOSITION Rework Scrap Use-as-is Work Order Update Date Step Qty Description of work order update or Non-conformance Change Gear General Bending Centre Not Concentric to O/S Cracks Cracks Broken/Damaged Crushed/Crimped Burrs Cuffs Contamination Cuffs Contamination Heat Treat Countersink Inspection Strip in Tube Dascription of work order update or Non-conformance City Change General Bending Bend Bom/Route Bom/Route Countersink Countersink Countersink Cut Too Short	Therm Disposition Rework Scrap Use-as-is Work Order Update Initial Chief Eng	DISPOSITION Rework Skid-tube Crosstube Small Fall Thermoforming Finishing Composite No. Date Step Qty Description of work order update Large Fab Composite Date Step Qty Or Non-conformance Chief Eng Description FAULT CATEGORY Rework Skid-tube Crosstube Small Fall Fall Fall Fall Fall Fall Fall	DISPOSITION Rework Scrap Use-as-is Work Order Update Date Step Qty Description of work order update or Non-conformance FAULT CATEGORY General Bending Centre Not Concentric to O/S Cracks Broken/Damaged Crushed/Crimped. Cuffs Cuffs Heat Treat Inspection Incomplete Inspection Incomple	WORK ORDER NON-CONFORMANCE / UPDATE QA Closed: DISPOSITION Rework Scrap Work Order Update Work Order Update Use-as-is Use-as-	WORK ORDER NON-CONFORMANCE / UPDATE QA Closed: Date DISPOSITION Rework Scrap Use-as-is Work Order Update Date Step Qty Description of work order update or Non-conformance FAULT CATEGORY Gear General Bending Centre Not Concentric to O/S Centre Not Concentric to O/S Cracks Cracks Broken/Damaged Instructions Incomplete Cracks Broken/Damaged Instructions Incomplete Cracks Cracks Countersink Instructions Incomplete Countersink Mislabeled Positioned Wrong Power Loss/Surge Machining Small Fab Prod. Eng. Coor. Rec/Store/Packaging Supplier Supplier Stign & Occupation Occupation Sign & Date Verification FAULT CATEGORY Gear General Bending Ovalized Over/Under tolerance Part Incorrect Part Moved Positioned Wrong Power Loss/Surge Power Loss/Surge		

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-18-13 10:25:55 AM

Packaging

Item ID: 646.3717 Accept *N900040100* Setup Start **Revision ID:** Item Name: Doubler **Start Date:** 4/18/13 **Start Qty: 10.00** *10* Cust Item ID: Required Date: 5/02/13 Req'd Qty: 10.00 *10* **Customer:** Reference: Run Start Process Plan: ____ Date: ____ Approvals: Tooling: Date: OC: Date:_____ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. Work Center ID Description Run Hours Code Qty Oty Number Stamp 130 QC8- Inspect parts - second check *130* 10 QC Memo Quality Control 140 Outsource process-Anodize per QSI017 4.1.10.1 0.00 *140* CL 13/05/14 10 Outsource4 Memo 0.00 Outsource process - Anodize Issue P/O: HARD ANODIZE, COLOR BLACK AS PER DWG.(SEE NOTE 2) 150 Receive & Inspect for Damage & Mat'l Certs 0.00 *150* Packaging Memo 0.00

										DQA:	Date:	*
NCR: Y	'es / No				WORK ORDER NON-C	100	VFOR	AANCE / UPDAT				*
						,35,2				QA Closed:	Date:	
Mork Orda	\r.				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Work Orde	:ı				Rework	1		Skid-tube C	rosstube		Water Jet	Engineering
Part N	lo				Scrap Use-as-is			Machining S	mall Fab		d. Eng. Coor.	Quality Other
NCR N	NCR No.				Use-as-is Thermoforming Finishing Work Order Update Large Fab Composite			~ <u></u>	rice, stor	Supplier		
Root				Descri	ption of work order update		nitial	Action		Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Descriptio	on	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling		İ									٠.	
Operator		į				•						
Material		İ										
Setup					·							İ
Other		1							-			
Process			· '	"								
Supplier				,								
Training		1										
Unapproved		1										<u> </u>
					F.	AUL	T CATE	GORY				·
Landi	ng Gear				General		-			ı	F	7
	Bending				Bend		Grain) —-	Ovalized		Pressure/Forced
	Centre N	ot Conce	ntric to	o/s	BOM/Route	L	Hardwa	re	ļ	Over/Under	-	Temperature/Cure
	Cracks				Broken/Damaged		Inspect	on Incomplete	}	Part Incorre	<u> </u>	Weld
	Crushed/	Crimped.			Burrs	L	Instruct	ions Incomplete/Uncle	ear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs				Contamination		Mainte	enance		Part Moved		
ļ	Heat Tre	at			Countersink		Mislabe	eled		Positioned V		7
	Inspection	n Strip in	Tube		Cut Too Short	Misread				Power Loss/	Surge	Other
	Ripples ii	n Bend			Drill Holes		Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

0.00

0.00

Memo

120

Quality Control

NCR: Y	es / No				WORK ORDER NON-O	CON	IFORM	MANCE / UP	DATE					
		***************************************	*******							QA Closed:	Date	· · · · · · · · · · · · · · · · · · ·		
Work Orde	ar·				DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Work Orac					Rework	1		Skid-tube	Crosstube		Water Jet	Engineering		
Part N	No.				Scrap		Machining	Small Fab	Pro	d. Eng. Coor.	Quality			
					Use-as-is	1	Therm	noforming	Finishing	Rec/Stor	re/Packaging	Other		
NCR N	lo		, , ,		Work Order Update] [Large Fab	Composite		Supplier			
Root Descr				Descri	ption of work order update		nitial	Δς	tion	Sign &	`			
Cause	Date	Step	Qty		or Non-conformance	t	ief Eng		ription	Date	Verification	QC Inspector		
Doc/Data	Date	эсер	Qty		or Non comormance	10111	ici ciig	0030	Прегол					
Equip/Tooling								,						
Operator														
Material				,]				
Setup		Ì												
Other														
Process														
Supplier														
Training														
Unapproved		<u> </u>					., <u></u>			<u> </u>		<u> </u>		
					F	AUL	T CATE	GORY						
Landi	ng Gear				General				<u></u>	7	Γ			
	Bending				Bend	\vdash	Grain		<u> </u>	Ovalized	<u> </u>	Pressure/Forced		
	Centre No	ot Conce	ntric to	o/s	BOM/Route	-	Hardwa		ļ	Over/Under	 	Temperature/Cure		
	Cracks				Broken/Damaged		•	on Incomplete		Part Incorre	 	Weld Wrong Stock Pulled		
	Crushed/	Crimped.	-	-	Burrs	—		ions Incomplete/	Unclear	Part Lost/M	_			
	Cuffs				Contamination	\vdash	Mainte			Part Moved				
	Heat Trea		- 1	<u> </u>	Countersink		Mislabe		}	Positioned \ Power Loss/		Other		
	Inspectio	•	Tube	<u> </u>	Cut Too Short Drill Holes	-	Misread Offset	ı	<u> </u>	Trower ross/	Juige _	Totales		
	Ripples in			_ ⊢	₫	-		Calibration						
	Torque Waves in Extrusion Turning Sequence		Drawing Finish	-		Sequence								
	Trutting 2	equence	'		Trunsu		July Ol .	Acquence						

Outside Dimensions

Date:

DQA:

Wave/Twist in Tube

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

. Work Order ID 100127 *100127*

April-18-13 10:25:55 AM

Item ID:

646.3717

Accept

N900040100

Setup Start

Revision ID: Item Name:

Start Date:

Doubler

4/18/13 **Start Qty: 10.00**

Cust Item ID:

Required Date: 5/02/13

Req'd Qty: 10.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

0.00

Date:

Start

Date:

SPC (Y/N):

Date:

Stop

Run

Sequence ID/ **Work Center ID**

Operation Description

Set Up/ **Run Hours** Tool ID

Tool # Plan Code

Accept Qty

Reject Qty

Reject Number

Insp. Stamp

190

Packaging

Memo

Identify as per dwg & Stock Location:_

0.00

Packaging

190

***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND

REV***

200

QC21- Final Inspection - Work Order Release

0.00

QC Quality Control

Memo

0.00

											DQA:	Dat	te:	
NCR:	res / N	0			WORK ORDER NON-C	100	NFORM	MANCE / UP	DATE		QA Closed:	Da	to.	•
											- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	1	ic.	
Work Orde	er:				DISPOSITION				AGAINST	DE	PARTMENT/	PROCESS		
					Rework	1		Skid-tube	Crosstube		Water Jet			Engineering
Part No.				Scrap	1	ſ	Machining	Small Fab		Prod	d. Eng. Coor.		Quality	
				Use-as-is		Therm	noforming	Finishing		Rec/Stor	e/Packaging		Other	
NCR No.			Work Order Update]		Large Fab	Composite			Supplier				
											C: 0			
Root				ł.	ption of work order update	1	nitial		tion		Sign &			06 (
Cause	Da	e Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription		Date	Verificatio	n	QC Inspector
Doc/Data				Ì										
Equip/Tooling														
Operator														
Material		İ												
Setup	Ш		1											
Other]											
Process														
Supplier														
Training														
Unapproved			<u> </u>											
					F.	AUL	T CATE	GORY						
Landi	ng Gear				General	_			1		1			1
	Bend	ng			Bend	L	Grain				Ovalized		_	Pressure/Forced
	Centr	e Not Conc	entric to	O/S	BOM/Route		Hardwa	re			Over/Under	tolerance	L	Temperature/Cure
	Crack	s			Broken/Damaged		Inspecti	ion Incomplete			Part Incorre	ct		Weld
	Crushed/Crimped. Burrs				Instruct	ions Incomplete/	'Unclear		Part Lost/Mi	ssing	L	Wrong Stock Pulled		
	Cuffs				Contamination		Mainte	enance			Part Moved			
	Heat	Treat			Countersink	Mislabeled					Positioned V	Vrong	_	-
	Inspection Strip in Tube Cut Too Short				Misread				Power Loss/	Surge		Other		

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

* April-18-13 10:25:59 AM

Work Order ID: 100127

Parent Item:

646.3717

Parent Item Name: Doubler

100127

646 3717

Start Date: 4/18/13

Required Date: 5/02/13

Start Qty: 10.00

Required Qty: 10.00

Comments:

IPP REV:A 12.10.22 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID		Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.063		Purchased	No			110	sf	220.8625	0.036	 9 .36			
M6061T6	SS 063								**	2 .50			1 2 4 36
6061-T6 .063 Sheet										0.5			Jm13-4-28
				Location		Loc (<u>Oty</u>	Loc Code					÷
				MAT021		220.8	625						
					123135	120.5	625				•		
					124003	10	00.3						
									3.5	151131			

125431

122431

										DQA:	Date	:	
NCR: Y	es / No				WORK ORDER NON-C	100	VFORM	MANCE / UPDA		•	 	•	
								A.4.5		QA Closed:	Date) .	
Work Orde	nr:				DISPOSITION		AGAINST DEPARTMENT/PROCESS						
WOIK OIGE	·				Rework	1		Skid-tube	Crosstube		Water Jet	Engineering	
Part N	lo			<u>.</u>	Scrap	f	Machining	Small Fab		d. Eng. Coor. re/Packaging	Quality		
NCR N	10		No		Use-as-is Thermoforming Finishing Work Order Update Large Fab Composite			Rec/Stor	Supplier				
Root				Descri	ption of work order update		nitial	Actio	n	Sign &			
Cause	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Descrip	tion	Date	Verification	QC Inspector	
Doc/Data													
Equip/Tooling													
Operator												Ì	
Material		ļ											
Setup													
Other												ļ	
Process			•										
Supplier						'							
Training													
Unapproved													
					F	AUL	T CATE	GORY					
Landi	ng Gear				General		,			1	_		
	Bending				Bend		Grain			Ovalized		Pressure/Forced	
	Centre N	ot Conce	ntric to	o/s	BOM/Route		Hardwa	ire		Over/Under	tolerance	Temperature/Cure	
	Cracks				Broken/Damaged		Inspecti	ion Incomplete	<u></u>	Part Incorre	ct	Weld	
	Crushed/	Crimped.	-		Burrs		Instruct	ions Incomplete/Un	clear	Part Lost/M	issing	Wrong Stock Pulled	
	Cuffs				Contamination		Mainte	enance		Part Moved			
	Heat Trea	at			Countersink		Mislabe	eled		Positioned V	Wrong _	_	
			Cut Too Short		Misread			Power Loss/	'Surge	Other			
	Ripples in Bend			Drill Holes		Offset							

Out of Calibration

Out of Sequence

Outside Dimensions

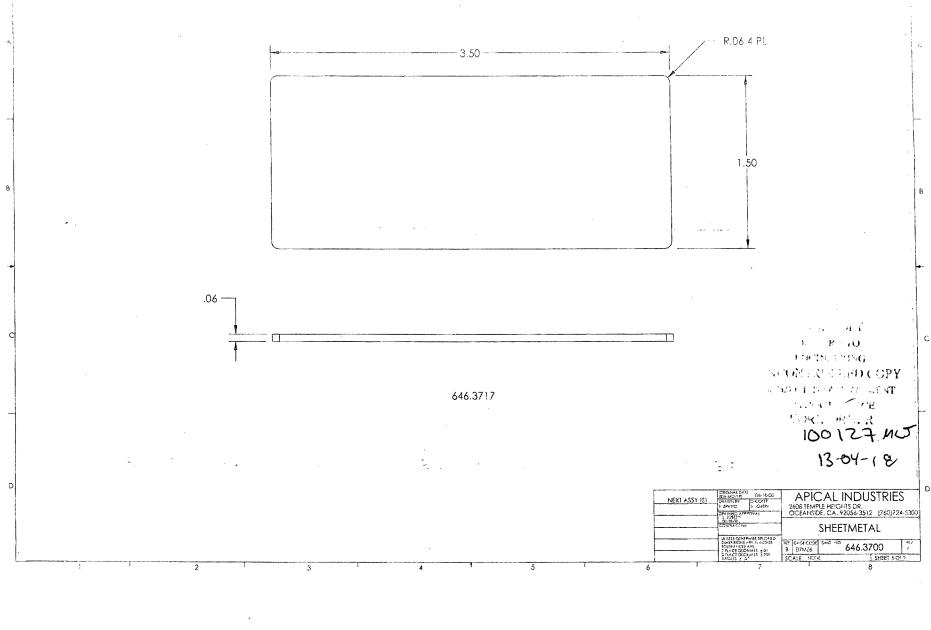
Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish



DART AEROSPACE LTD	Work Order:	100127
Description: Doubles	Part Number:	646.3717
Inspection Dwg: 646.3700Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

<u></u>	THE PARTICLE MOTEOTICAL CITEOTECT											
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments						
3.50"	11-0.010	3,498"	•		ν	Jk-mal						
1.50"	th-0.000	1.503"			J							
0.063	41-0-010	0.001			J							
	,											
:												
		1										
					r							
	<u> </u>		- A	l								

Measured by:	Im	Audited by:	2/	Preliminary Approval:	
Date:	13-4-28	Date:	13.429	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15



A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62398

Date: 24-May-13

То

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

		·'	11. 010-032-0200	Fax. 013-032-1103	
Terms		Ship Via			
Quantity	Description	<u> </u>			
1	Part: ASST		Rev:		
lot			INGV.		
	20 PCS-646-3812			•	
	10 PCS 646.3717) 20 PCS 646.3718				
`	20 PCS 646.3719				
	10 PCS 646.3713				
	12 PCS 646.3714				
	25 PCS 646.3813 32 PCS 646.3810				
	132 FC3 646.38 10				
	HARD ANODIZE BLACK				
i	MIL-A-8625 TYPE III CLASS 2				
	PRIME MIL-P-23377J TYPE I CLAS	SN			
	6 PCS D4703-042				
	16 PCS D4726-1				
	BLACK ANODIZE				
:	MIL-A-8625 TYPE II CLASS 2				
	Job: 20130308	PO: 19887	Line:		
	Certificate of Conf	ormance			
	A.T.G. Industries certifies that all items ir with all requirements, specifications and	ւ this shipment are ir drawings referenced	n conformance in the purchase order.		
0.00	ISO 9001 : 2008 REG ATG SALES-2010 TER DATE : 24/5/13				
	w				
	CERTIFIED SIGNATURE :				
			-		
	RECEIVER SIGNATURE :				
			-		